

CLAIMS

1. An apparatus comprising:

an emitter to emit radiation as a fan-beam substantially parallel to a head of a drum;

a substantially arcuate array of detectors positioned to detect radiation emitted by the emitter, each
5 detector responsive to a decrease in radiation caused by an object interrupting a radiation path between the
emitter and the detector; and

an interface that allows for acquisition of information related to detected radiation.

2. The apparatus of claim 1 further comprising a mount for mounting the apparatus to the drum.

3. The apparatus of claim 1 further comprising a second emitter to emit radiation as a fan-beam
substantially parallel to the head of the drum.

4. The apparatus of claim 1 wherein an uninterrupted radiation path causes a detector to produce a
15 first voltage associated with a first state and wherein an interrupted radiation path causes the detector to produce a
second voltage associated with a second state.

5. An apparatus comprising:

a first emitter to emit radiation from a first perspective substantially parallel to a head of a drum;

a second emitter to emit radiation from a second perspective substantially parallel to the head of the
20 drum;

detectors to detect interruptions in the radiation from the first perspective as caused by an object; and

detectors to detect interruptions in the radiation from the second perspective as caused by an object,
wherein detected interruptions allow for determination of at least one member selected from a group consisting of
25 sounds, sound effects and control actions.

6. The apparatus of claim 5 wherein the determination determines a parameter of a MIDI message.

7. The apparatus of claim 5 wherein the apparatus mounts to the drum.

8. The apparatus of claim 5 wherein at least one detector can detect interruptions in the radiation
from the first perspective and can detect interruptions in radiation from the second perspective.

9. The apparatus of claim 5 wherein the first emitter and the second emitter are pulsed emitters.

10. The apparatus of claim 9 wherein the first emitter and the second emitter are pulsed at different
times.

11. The apparatus of claim 5 further comprising a control component that includes a microprocessor.

12. A method comprising:

emitting radiation from a first perspective substantially parallel to a head of a drum;

emitting radiation from a second perspective substantially parallel to the head of the drum;

acquiring information from an first arcuate array of detectors wherein the information indicates whether an object interrupted the radiation from the first perspective and acquiring information from a second arcuate array of detectors wherein the information indicates whether an object interrupted the radiation from the second perspective; and

based at least in part on the information, determining at least one member selected from a group consisting of sounds, sound effects and control actions.

13. The method of claim 12 wherein the first arcuate array of detectors and the second arcuate array of detectors include one or more common detectors.

14. The method of claim 12 wherein the emitting radiation from a first perspective and the emitting radiation from a second perspective occur at different times.

15. The method of claim 12 wherein the acquiring information from the first arcuate array of detectors and the acquiring information from the second arcuate array of detectors occur at different times.

16. The method of claim 12 wherein the acquiring information acquires state information.

17. The method of claim 16 wherein the state information specifies an interrupted state and an uninterrupted state.

18. The method of claim 12 wherein the acquiring and the determining are at least partially embodied in a computer-readable medium operable in conjunction with a microprocessor.

19. The method of claim 12 wherein the determining includes determining a velocity of the object.

20. The method of claim 12 wherein the emitting radiation from a second perspective occurs in response to a change-of-state in information from the first arcuate array of detectors.